FOSS

Animals 2x2

Concept and Lesson Map

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FOSS Concept and Lesson Map: Animals 2x2

The Big Picture

This unit helps students respect living organisms through observation and comparison of animals. Students work to expand their concept of animal, noticing the similarities and differences in the body structures, behaviors, needs, and environments in which these organisms live.

Investigation 1: Goldfish and Guppies

Goal: Observe and compare the structures and behavior of goldfish and guppies. Observe and describe the environment in which goldfish and guppies survive.

Part 1:
The Structure of Goldfish
Students observe goldfish, name different parts, look for similarities and differences and record.

IQ: What are parts of the goldfish?

Part 2:
Caring For Goldfish
Students care for goldfish, and add plants while observing fish behavior.

IQ: What do goldfish need to live?

Part 3:
Goldfish Behavior
Students add a tunnel to the aquarium and make own paper aquariums to model fish behavior.

IQ: What do goldfish do?

Part 4:
Comparing Guppies To Goldfish
Students compare the structures and behavior of guppies and goldfish.

IQ: How are guppies and goldfish different? How are they the same?

Investigation 2: Land and Water Snails

Goal: Observe and compare the structures and behavior of land and water snails. Observe and describe the environment in which land and aquatic snails survive.

Part 1:
Land Snails
Students get to know the land snails by handling and observing.

IQ: What are the parts of a land snail?

IQ: What do land snails do?

Part 2:
Snail Movement
Students observe how snails move.

IQ: How do snails move?

Part 3:
Observing Water Snails
Students observe aquatic snail. They compare land and aquatic snails.

IQ: How are water and land snails different?

IQ: How are they the same?

Part 4:
Shells
Students observe shells and look for shells that may have belonged to relatives of the land snail they observed. They organize shells into pairs or group.

IQ: How can shells be grouped?

Investigation 3: Big and Little Worms

Goal: Observe and compare structure and behavior of redworms and night crawlers. Observe and describe the environment in which they survive.

Part 1:
The Structure of Redworms
Students look at redworms for structures they have seen on other animals.

IQ: What are the parts of the redworm?

Part 2:
Redworm Behavior
Students focus on movement and behavior of redworms.

IQ: What do redworms do?

Part 3:
Comparing Redworms to Night Crawlers
Students compare the structure and behaviors of redworms and night crawlers.

IQ: How are redworms and night crawlers different?

IQ: How are they the same?

Investigation 4: Pill Bugs and Sow Bugs

Goal: Observe and compare the structures and behavior of pill and sow bugs. Observe and describe the environment in which they survive with others.

Part 1:
Isopod Observation
Students investigate structure and behavior of isopods.

IQ: What are isopods?

Part 2:
Identifying Isopods
Students compare and sort isopods. Students observe how they move.

IQ: How are pill bugs and sow bugs different?
How do they move?

Part 4:
Animals Living Together
Students build a class terrarium with isopods, snails, and earthworms.

IQ: What do animals need?

Part 3 is optional.

Investigation 5: Eggs and Chicks

Goal: Observe and compare the structures and behavior of chicks.

Part 1:
Setting the Eggs
Students set up a classroom incubator to hatch chicken eggs.

IQ: What do eggs need to hatch into chicks?

Part 2:
Watching Eggs Hatch
Students observe eggs as they begin to hatch.

IQ: How do chicks hatch?

Part 3:
The Structure of Chicks
Students compare the chicks to each other and look for different body parts.

IQ: What are the parts of a chick?

Part 4:
Chick Behavior
Students observe the behavior of how the chicks eat, drink and behave around people.

IQ:What do chicks do?

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